

RCA AMATEUR RADIO CLUB

MARCH, 2013 MONTHLY NEWSLETTER INDIANAPOLIS, IN

THE NEXT MEETING OF THE RCA AMATEUR RADIO CLUB WILL BE
TUESDAY, MARCH 12th, 6:30 PM AT [G.T. SOUTH'S](#),
5711 E. 71st STREET, INDIANAPOLIS, IN

RCA ARC NEWS

SUMMARY OF THE FEBRUARY MEETING – Thanks to all those who attended. AF9A gave a report on the status of the repeater. The network connection has not yet been completed but Terry, WD9HQB, has volunteered to install the fiber terminations. He will also be doing some terminations for the ICE group at the same time. A mutually agreeable date will be determined. No progress has been made on getting the IVY Tech receive site in operation. When the WX warms up a bit, we'll try and make that happen. Jim, K9RU, reported that the plans for a Field Day operation with the Indy Radio Club were in progress. The site has not been determined yet. The Belzer BSA camp is a possibility. The Indy Hamfest, and its relocation to the Marion County Fairgrounds was discussed. Dave, N9KZJ, reported on this year's Ships on the Air event the first week of June.

NEXT TEST SESSION: Mar 09 2013, 12:00 PM (Walk-ins allowed)

Location: Integrated Public Safety Commission, 8468 E 21st St, Indianapolis IN 46219-2517

Sponsor: Indianapolis Radio Club -W9JP

Contact: Rhonda S. Curtis (317) 363-7457 **Email:** ws9h@arrl.net

SEVERE WEATHER SPOTTERS TRAINING – The Marion County annual Severe Weather Spotters training seminar will be held on Saturday, March 9th at 9:00AM at the Integrated Public Safety Commission / Communications Training Center (ISP), 8468 E. 21st St. in Indianapolis. All interested parties are invited to attend. Non-hams are welcome. Additional training seminars will be held at these locations:

March 9, 1:00 PM Danville, Hendricks County Gov't. Center, 355 S. Washington
March 13, 7:00 PM Fishers Town Hall, One Municipal Drive
March 18, 7:00 PM Franklin, Johnson County Sheriff Building, 1111 Hospital Road
March 19, 7:00 PM Indianapolis, IUPUI Campus Center, 420 University Blvd.

Classes last approximately 2 hours. No need to preregister for sessions. For more information, point your browser to <http://www.crh.noaa.gov/ind/?n=spotter#train>.

HAMFESTS, OPERATING EVENTS & TESTING

Mar 8 IRC meeting, <http://www.indyradioclub.org/>
Mar 9 Marion Co. Weather Spotter Seminar, ISP Post, 8468 E. 21st St.
Mar 9 License testing, after the weather spotter seminar.
Mar 9 Terre Haute Hamfest, <http://www.w9uuu.org/>
Apr 13 Columbus Hamfest, <http://www.carcnet.org/>
Apr 20 North Central Indiana Hamfest, <http://nci-hamfest.net/>

Apr 21	Rookie Roundup – Phone
May 17-19	Dayton Hamvention, Hara Arena, Trotwood, OH
June 8-9	June VHF Contest
June 22-23	Field Day
July 13	Indy Hamfest, Marion Co. Fair Grounds

All dates, unless otherwise stated, are UTC.

<http://www.arrl.org/contest-update-issues> Contests updates

<http://www.hornucopia.com/contestcal/> WA7BNM Contest Calendar

<http://www.arrl.org/special-event-stations> ARRL Special Event Stations page

http://www.arrl.org/exam_sessions/search ARRL training page for test sessions

<http://indyhams.org/events/> Indiana events and public service opportunities.

FCC PROPOSES MORE SPECTRUM AT 5 GHZ FOR UNLICENSED BROADBAND

On February 20, the FCC released a *Notice of Proposed Rulemaking (NPRM)* in [ET Docket No. 13-49](#), seeking to revise the Part 15 rules governing unlicensed national information infrastructure (U-NII) devices in the 5 GHz band. These devices presently operate in the frequency bands 5.15- 5.35 GHz and 5.47-5.825 GHz. They use wideband digital modulation techniques to provide a wide array of high data rate mobile and fixed communications for individuals, businesses and institutions. Slightly different rules apply to 5.825-5.85 GHz. Among the changes being proposed are two additional bands totaling 195 MHz for unlicensed operation: 5.35-5.47 GHz and 5.85-5.925 GHz. The Amateur Radio Service has a secondary allocation at 5.65-5.925 GHz, including an Amateur Satellite Service uplink allocation of 5.65-5.67 GHz and a downlink allocation of 5.83-5.85 GHz.

The FCC notes in the *NPRM* that since it first made available spectrum in the 5 GHz band for U-NII in 1997, it has gained “much experience” with these devices: “We believe that the time is now right for us to revisit our rules, and, in this *NPRM*, we propose to modify certain technical requirements for U-NII devices to ensure that these devices do not cause harmful interference and thus can continue to operate in the 5 GHz band and make broadband technologies available for consumers and businesses.”

The *NPRM* also satisfies Section 6406 (a) of the *Middle Class Tax Relief and Job Creation Act of 2012* that required the FCC to begin a proceeding to modify the Part 15 rules to allow unlicensed U-NII devices to operate in the 5.35-5.47 GHz band, subject to consultation with the National Telecommunications and Information Administration ([NTIA](#)). In response to the same legislation, the NTIA recently released an [evaluation](#) of the 5.35-5.47 GHz and 5.85-5.925 GHz bands that details the existing occupancy of these bands by federal and non-federal users and the potential risks of expanded unlicensed use.

“The Amateur Radio Service has a good record as a spectrum partner with the other licensed services in the 5 GHz band,” observed ARRL Chief Executive Officer David Sumner, K1ZZ. “The ARRL plans to respond to the *NPRM* by pointing out that meaningful access to the 5 GHz band for amateur and amateur satellite operations continues to be in the public interest.”

The FCC is accepting comments on its *NPRM* (due no later than 45 days after publication in the *Federal Register*), as well as reply comments (due 30 days later). No date has yet been set for the *NPRM*'s publication in the *Federal Register*. --ARRL Letter

AMERICAN RED CROSS TO PHASE OUT EMERGENCY COMMUNICATION RESPONSE VEHICLES

The American Red Cross has made the decision to phase out and decommission its Emergency Communication Response Vehicles (ECRVs), due to changes in technology, as well as a new satellite system and other factors regarding the vehicle fleet. "Retrofitting the decade-old vehicles with new equipment is not a good use of donated funds, as the long-term strategy is to move to more portable systems," American Red Cross Disaster Services Technology Manager Keith Robertory, KG4UIR, told the ARRL. "This is consistent with the trends in the telecom and technology industries."

The American Red Cross will be removing the Amateur Radios from the ECRVs as part of the decommissioning process. These radios will either become part of the deployable inventory or provided to the local American Red Cross chapter to build local capacity. Equipment that can be used by the American Red Cross will not be phased out with the vehicle. According to Robertory, every communication capability of the ECRV already exists -- or will soon exist -- as a rapidly deployable kit that can be loaded on *any* vehicle that is owned or rented by the American Red Cross, providing more flexibility in shaping its response to match the disaster.

"From a radio perspective, the American Red Cross has a variety of different kits for amateur, business and public safety bands covering HF, VHF and UHF with portable radios, mobile units and base stations," he explained. "Two-way radio remains a valuable tool, providing communications in the initial days or weeks of a disaster, until normal communications is restored. Each American Red Cross chapter should continue with -- and improve -- the relationship with their local Amateur Radio operators. In a disaster, Amateur Radio will be the fastest deployed radio network because operators already live in the impacted communities."

Robertory called the ECRV operators "the key to the success of the ECRV program through the years," saying their skills, dedication and flexibility have made the ECRV one of the most visible aspects of the American Red Cross Disaster Technology team. The ability to establish connectivity and communications remains vital to the American Red Cross, and their skills will continue to be needed as the American Red Cross implements new technology strategy and tactics. The commitment and flexibility of technologists -- including radio operators -- is what makes technology on a disaster successful. Building our future path based on the lessons we have learned is important to keep us all successful."

Radio amateurs who are concerned about how the decommissioning of ECRVs will affect opportunities to serve the American Red Cross can be assured that such opportunities still exist. "This should not be seen as a setback for those radio amateurs who are working with the American Red Cross," said ARRL Emergency Preparedness Manager Mike Corey, KI1U. "In disaster response, adaptability is critical and keeping up with new technology is essential. This all must be done with a mind toward an effective and efficient response. Amateurs have played an important role in assisting the American Red Cross with their mission and I know we will continue to do so in the future."

Information about how to purchase these vehicles will be shared at a later date. --ARRL Letter

FCC ISSUES \$10,000 FINE TO MISSOURI MAN FOR UNLICENSED OPERATION ON 14.312 MHZ

On February 25, the FCC issued a *Notice of Apparent Liability for Forfeiture* ([NAL](#)) in the amount of \$10,000 to Jared A. Bruegman, ex-KC0IQN, of Bolivar, Missouri. The FCC said that Bruegman "apparently and willfully violated Section 301 of the Communications Act of 1934, as amended by operating an unlicensed radio transmitter on the frequency 14.312 MHz in Bolivar, Missouri." Bruegman -- who does not currently hold an Amateur Radio license -- was operating in the phone portion of the 20 meter band that is assigned to the Amateur Radio Service on a primary basis; his Amateur Radio license expired in 2010. As a former Technician class licensee, he did not have privileges to operate in that portion of the 20 meter band when he held an Amateur Radio license.

In December 2012, the FCC's office in Kansas City received a complaint from an Amateur Radio operator, reporting interference on 14.312 MHz. Upon investigation, agents from that office heard a male voice transmitting on the frequency 14.312 MHz. Using direction finding equipment, the agents located the source of the radio frequency transmissions to a transmitting antenna mounted on a pole next to Bruegman's residence. The agents determined that the signals on 14.312 MHz exceeded the limits for operation under Part 15 of the Commission's rules and therefore a license was required to transmit. The agents further discovered that Bruegman did not hold a license to operate a radio transmitter on 14.312 MHz at or near that location.

The agents determined that the source of the transmissions was coming from an unlicensed radio transmitter from a bedroom in Bruegman's residence. "Mr Bruegman was the only person present in the bedroom and the only male in the residence during the inspection," the *NAL* stated. "Mr Bruegman admitted to the agents that he owned the radio transmitter. The agents observed that the transmitter was turned on and tuned to 14.311 MHz. Mr Bruegman told the agents that he had no current Commission licenses, but that he previously held an Amateur Radio license, call sign KC0IQN. Mr Bruegman told the agents he would remove the microphone from his transmitter and only use it as a receiver."

Section 503(b) of the Communications Act provides that "any person who willfully or repeatedly fails to comply substantially with the terms and conditions of any license, or willfully or repeatedly fails to comply with any of the provisions of the Act or of any rule, regulation, or order issued by the Commission thereunder, shall be liable for a forfeiture penalty." In addition, Bruegman was found to be in violation of Section 301 of the Communications Act, stating that "no person shall use or operate any apparatus for the transmission of energy or communications or signals by radio within the United States, except under and in accordance with the Act and with a license granted under the provisions of the Act."

Bruegman has until March 27, 2013 to pay the forfeiture in full, or file a written statement seeking its reduction or cancellation. --ARRL Letter

AMATEUR-CREATED "VARICODE" ADOPTED AS ITU RECOMMENDATION

On Tuesday, February 19, François Rancy -- Director of the Radiocommunication Bureau ([ITU-R](#)) of the International Telecommunication Union ([ITU](#)) -- announced the simultaneous adoption and approval by correspondence of a new Recommendation entitled *Telegraphic Alphabet for Data Communication by Phase Shift Keying at 31 Baud in the Amateur and Amateur-Satellite Services*. The alphabet -- commonly called "Varicode" because the more frequently used characters (in the English language) occupy fewer bits -- was developed by Peter Martinez, G3PLX, in the 1990s. Martinez was awarded the ARRL Technical Innovation Award for the year 2000 by the ARRL Board of Directors for his development of PSK31, which uses Varicode for transmission efficiency in much the same way as the Morse code. In ITU parlance, it now becomes Recommendation ITU-R M.2034.

Adoption of the Recommendation is the culmination of work conducted in ITU-R Study Group 5 and its Working Party 5A during 2011 and 2012. Working Party 5A is responsible for studies of techniques and frequency usage in the Amateur and Amateur-Satellite Services, as well as certain aspects of the land mobile and fixed services.

The Recommendation was proposed by the United States, and ARRL Chief Technology Officer Brennan Price, N4QX, advocated for the Recommendation's adoption as United States spokesperson for Amateur Radio issues at Working Party 5A. "The text of the Recommendation borrows heavily from the [technical description of PSK-31](#), prepared by Steven Karty, N5SK, on the ARRL's website," Price explained. "Steven's thorough description of Peter's invention enjoyed relatively smooth sailing within the United States preparatory process and at the ITU."

Adoption of an ITU-R Recommendation requires multiple levels of review. Following proposal by an administration, a draft Recommendation is vetted by one or more relevant ITU-R Drafting Groups, Working Groups, Working Parties and Study Groups, usually through several meeting cycles. "We are grateful to United States 5A delegates -- particularly delegation leadership from the FCC, NTIA and the State Department -- for supporting this effort at every step of the process," Price said. "We also appreciate the deliberations of ITU delegates from dozens of countries who evaluated the draft as it proceeded to adoption and approval."

"Nothing that radio amateurs do on the air will change as a result of this ITU decision, but it is significant nonetheless," observed ARRL Chief Executive Officer David Sumner, K1ZZ. "It provides further documentation in an important international forum of radio amateurs' continuing creativity and contributions to the art and science of radio communication." --**ARRL Letter**

LAST MAN STANDING TO FEATURE AMATEUR RADIO STORYLINE

In an episode tentatively scheduled to air Friday, March 15, the hit ABC comedy *Last Man Standing* -- starring Tim Allen as Mike Baxter, KA0XTT -- will [feature a secondary ham radio storyline](#). This is the first time that the show will highlight Amateur Radio in its plot, showing various cast members on the air and communicating via ham radio.

In Episode 217 -- called "The Fight" -- Mike's daughter Mandy (played by Molly Ephraim), gets her [cell phone](#) taken away as punishment. She discovers Mike's home shack in the basement and uses ham radio to make faraway friends. According to *Last Man Standing* Producer John Amodeo, NN6JA, the home shack is a brand new set built just for this episode. The ARRL provided many of the awards and certificates -- including 5 Band DXCC, 5 Band Worked All States, 5 Band Worked All Continents, VUCC (for 50 MHz), the Diamond DXCC Challenge and the Morse Code Proficiency Certificate -- seen on Mike Baxter's home shack wall.

Two other regular cast members -- Mike's boss Ed Alzate (played by Hector Elizondo) and Mike's co-worker Kyle Anderson (played by Christoph Sanders) -- will also have Amateur Radio call signs and be shown on the radio.

"As a ham, I am very excited to be able to have an episode that presents our hobby in an upbeat and positive way," Amodeo told the ARRL. "As a television producer, I am pleased to present a very funny episode for our more than 7 million viewers. This episode will feature more ham gear than seen in mainstream movies such as *Frequency*, *Contact* and *Super 8* -- all great films that had Amateur Radio in them. It's worth noting that although hams will enjoy the episode, it was written with our 7 million non-ham viewers in mind. Please be prepared for some inconsistencies related to Amateur Radio, but enjoy the show nevertheless."

Last Man Standing is produced by 20th Century Fox for the ABC Television Network and airs on Friday nights at 8 PM Eastern and Pacific and 7 PM Central.

SHORTS

HAMMOND MANUFACTURING TO TAKE OVER DAHL TRANSFORMER LINE – [Hammond Manufacturing](#) of Cheektowaga, New York, has announced that it will take over the Peter W. Dahl line of transformers from [Harbach Electronics](#). Upon his retirement in 2007, Peter Dahl, K0BIT (SK), sold his company to Harbach Electronics, but earlier this month, that company [announced](#) that it would no longer support Dahl products and was in negotiations with other manufacturers to take over the Dahl product line of transformers and magnetics. According to both Harbach Electronics and Hammond Manufacturing, finalization of the acquisition and transfer of assets will take place over the next few weeks, with the transfer to be completed by March 31, 2013. --ARRL Letter

THREE OPERATIONS APPROVED FOR DXCC CREDIT – ARRL DXCC Manager Bill Moore, NC1L, reports that three current operations have been approved for DXCC credit: 5X8C in Uganda (commencing in 2012) and the T6TJ (commencing in 2012) and T6BP (commencing in 2011) operations in Afghanistan. "If you have had cards for these operations rejected in a recent application, please send an [e-mail](#) to the ARRL DXCC Desk and you will be placed on the list for an update," Moore said. "If your QSOs were only via Logbook of The World ([LoTW](#)), they were not imported to DXCC, since the operations were not approved at the time of your submission. LoTW QSOs can be reclaimed via your next LoTW submission. Once updated, results will appear in LoTW accounts, as well as online in the [daily listings](#). --ARRL Letter

NOMINATIONS NOW OPEN FOR ARRL TECHNICAL AND EDUCATIONAL AWARDS – Each year, the ARRL Board of Directors has the opportunity to select recipients for a number of awards in various categories that honor Amateur Radio operators. The nomination period is now open for the ARRL awards, which are designed to recognize educational and technological pursuits in Amateur Radio, including an award that honors a young Amateur Radio operator. ARRL members may nominate hams for the Herb S. Brier Instructor of the Year Award, the Hiram Percy Maxim Award, the ARRL Microwave Development Award, the ARRL Technical Service Award, the ARRL Technical Innovation Award and the Knight Distinguished Service Award. Read more [here](#). --ARRL Letter

SOLAR UPDATE – The predicted solar flux for the near term is 110 on March 1-3, 105 on March 4-7, 100 on March 8, 95 on March 9-14, 100 on March 15-16, 105 on March 17, and rising to 110 on March 18-20. The solar flux then reaches a peak of 120 on March 25-27, and on March 28-April 6, it looks like it will hover around 113. The predicted planetary A index is 12 and 8 March 1-2, 5 on March 3-4, 8 on March 5, 7 on March 6-7, 5 on March 8-10, 7 on March 11-12, and back down to 5 on March 13-20.

Now that February is over, let's look at some updated averages. Our most recent three-month [moving average](#) -- centered on January 2013 -- is not impressive with its average daily sunspot number of 73.6. This is below every three-month moving average for last year, except the three months centered on March 2012, which was 71.2. The three-month moving averages of daily sunspot numbers centered on January 2012-January 2013 were 83.3, 73.7, 71.2, 87.3, 91.5, 96.5, 91.9, 89.9, 81.2, 82.3, 74.4, 82.8 and 73.6.

THE *RCA ARC MONTHLY NEWSLETTER* IS COMPILED AND EDITED BY JIM RINEHART, AND JIM KEETH. ALL MATERIAL CONTAINED HEREIN IS OBTAINED FROM THE SOURCES CREDITED AND EDITED FOR THIS NEWSLETTER. EMAIL TO <mailto:WebMaster@w9rca.org>. Check our web site at <http://www.w9rca.org/>

YOU'RE INVITED!

TO:

SEVERE WEATHER SPOTTING TRAINING

WHEN:

SATURDAY MARCH 9TH, 2013, 9:00 AM

WHERE:

**Integrated Public Safety Commission/ Communications Training
Center, 8468 E. 21st St, Indianapolis**

Take I-70 east of I-465 to Post Road and south to 21st St. Then 0.5 miles west of Post Road on 21st St. and just west of the State Police museum complex

WHO:

David Tusick - National Weather Service

Severe Weather Identification & Spotting

Robert Blake - N9FIM / WA9MVP - Marion Co.

Severe Weather Amateur Net

Severe Weather Amateur Radio Net Operations

During severe weather, amateur radio operators gather on an amateur radio network to report their severe weather observations to the National Weather Service. These reports are used to augment the weather service's radar and other observations. Before the start of the severe weather season, which starts in March or April, each year Marion Co. amateur radio (HAM) operators meet with a representative of the National Weather Service to learn the latest in severe weather spotting and reporting. Also at this training session, Severe Weather Amateur Net operations are discussed. Try to arrive a little early so that we can start on time. This training session should conclude well before 12:00 Noon.

Please consider this an invitation for you and your staff. You don't have to be an amateur radio operator to attend. If you have any questions please contact Robert Blake at 823-2171.

It's Free!